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STATE DOCUMENTS

SIXTH REPORT CALENDAR 1961

ALSO CUMULATIVE REPORT FOR 1957 THROUGH 1961

INFANT

and

NEONATAL MORTALITY

and

STILLBIRTH RATES

by

PREPARED BY:

MONTANA STATE BOARD OF HEALTH
DIVISION OF CHILD HEALTH SERVICES
DIVISION OF RECORDS AND STATISTICS

- AND -

MONTANA MEDICAL ASSOCIATION
MATERNAL & CHILD WELFARE COMMITTEE

MONTANA HOSPITALS

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FOREWORD

TO: Hospital Administrators
Medical Staffs, and Nurses

This 6th annual report comprises a tabulation of the births, neonatal deaths, infant deaths and stillbirths that have occurred in Montana hospitals during 1961. In this manner, information on vital statistics is distributed to the medical and nursing profession and to hospital administrators in order to evaluate the statistics of their own hospital and continue to improve the caliber of maternal and newborn care.

Hospitals in Montana doing obstetrics cooperated with the State Board of Health and the Maternal and Child Welfare Committee of the Montana Medical Association by returning quarterly information on the number of live births, stillbirths, neonatal, and infant deaths occurring in their respective hospitals. This information has been tabulated for each of four groups representing a classification by number of hospital beds.

In 1961, there were 16,764 live births in Montana, by place of occurrence (this does not include home deliveries), for a rate of 24.4 per 1,000 estimated population.

<u>DEATHS</u>		<u>RATE PER 1,000 LIVE BIRTHS</u>
Infant (birth to 12 months)	320	19.1
Neonatal (birth to 28 days)	296	17.6
Fetal (stillbirth)	184	11.0
Perinatal (neonatal & fetal)	480	28.6
1 - 12 months	24	1.4

The above data show little difference from the perinatal and infant death rates in 1960, even though the birth rate had markedly declined. In 1960, the birth rate (by place of occurrence) was 25.3 per 1,000 estimated population. The infant death rate was 18.9; neonatals, 16.3; fetal, 11.0 and perinatal, 28.3, all calculated rates per 1,000 live births.

Because interest in this report continues to remain high, the study will be continued. It is hoped the hospital medical and nursing staffs will continue to cooperate by reporting their statistics and by continuing to support the perinatal death study. It is further hoped that the administrators, medical staffs and nurses will review the report and consider where improvements can be made in their own hospital. Your hospital is checked in red in the report.

This cumulative report covers the past five years. Because some hospitals have not operated continuously during the past five years, and 3 have closed during 1961, the five-year totals in "B" and "C" charts will vary. Those hospitals not having figures for five years are not included in the "C" charts.

Montana State Board of Health
Maternal & Child Welfare Committee
of the Montana Medical Association

#1 A - GENERAL HOSPITALS
(100 beds or more)

Montana - 1961

Infant and Fetal Mortalities

Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	6,864	114	11	103	83	16.6	1.6	15.0	12.1
1	787	9	2	7	12	11.4	2.5	8.9	15.2
2	404	4	0	4	3	9.9	0.0	9.9	7.4
3	1,081	13	0	13	8	12.0	0.0	12.0	7.4
4	463	6	0	6	5	13.0	0.0	13.0	10.8
5	1,040	18	3	15	12	17.3	2.9	14.4	11.5
6	1,202	20	1	19	16	16.6	.8	15.8	13.3
7	979	19	0	19	15	19.4	0.0	19.4	15.3
8	908	25	5	20	12	27.5	5.5	22.0	13.2

#1 B - GENERAL HOSPITALS
(100 beds or more)

Montana - 1957 through 1961

Year	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	* 36,086	684	88	596	429	19.0	2.4	16.5	11.9
1957	7,778	152	22	130	86	19.5	2.8	16.7	11.1
1958	7,318	128	11	117	96	17.5	1.5	16.0	13.1
1959	7,160	158	27	131	80	22.1	3.8	18.3	11.2
1960	6,966	132	17	115	84	18.9	2.4	16.5	12.1
1961	6,864	114	11	103	83	16.6	1.6	15.0	12.1

*These figures differ from the "C" chart because one hospital included in previous years no longer gives OB service

#1 C - GENERAL HOSPITALS
(100 beds or more)

Montana - 5 Year Period - 1957-1961

Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	34,416	651	84	567	400	18.9	2.4	16.5	11.6
1	1,863	27	4	23	12	14.5	2.1	12.3	6.4
2	4,872	79	16	63	67	16.2	3.3	12.9	13.8
3	2,411	37	2	35	34	15.3	0.8	14.5	14.1
4	4,557	78	11	67	52	17.1	2.4	14.7	11.4
5	6,392	117	9	108	76	18.3	1.4	16.9	11.9
6	4,535	99	18	81	53	21.8	4.0	17.9	11.7
7	5,399	116	13	103	59	21.5	2.4	19.1	10.9
8	4,387	98	11	87	47	22.3	2.5	19.8	10.7

One hospital not included in 5 year study because it was no longer giving obstetrical service

#2 A - INTERMEDIATE GENERAL HOSPITALS
(40-99 beds)

Montana - 1961

Infant and Fetal Mortalities

Neonatal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	5,953	119	3	116	62	18.7	.5	19.5	10.4
1	332	3	0	3	6	9.0	0.0	9.0	18.0
2	208	2	0	2	0	9.6	0.0	9.6	0.0
3	324	4	0	4	6	12.3	0.0	12.3	18.5
4	317	4	0	4	1	12.6	0.0	12.6	3.2
5	235	3	0	3	3	12.8	0.0	12.8	12.8
6	532	7	0	7	8	13.2	0.0	13.2	15.0
7	492	8	0	8	6	16.3	0.0	16.3	12.2
8	209	4	0	4	4	19.1	0.0	19.1	19.1
8	524	10	0	10	8	19.1	0.0	19.1	15.3
9	358	7	0	7	0	19.6	0.0	19.6	0.0
10	402	8	0	8	3	19.9	0.0	19.9	7.5
11	664	16	2	14	2	24.1	3.0	21.1	3.0

#2 A - INTERMEDIATE GENERAL HOSPITALS
(40-99 beds)

Montana - 1961 (continued)

Infant and Fetal Mortalities

Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
12	318	7	0	7	3	22.0	0.0	22.0	9.4
13	212	6	1	5	1	28.3	4.7	23.6	4.7
14	443	15	0	15	7	33.9	0.0	33.9	15.8
15	320	12	0	12	4	37.5	0.0	37.5	12.5
16	63	3	0	3	0	47.6	0.0	47.6	0.0

#2 B - INTERMEDIATE GENERAL HOSPITALS
(40-99 beds)

Montana - 1957 through 1961

Year	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	29,626	554	47	507	351	18.7	1.6	17.1	11.8
1957	5,747	111	14	97	72	19.3	2.4	16.9	12.5
1958	5,569	109	7	102	69	19.6	1.3	18.3	12.4
1959	6,180	105	10	95	80	17.0	1.6	15.4	12.9
1960	6,177	110	13	97	68	17.8	2.1	15.7	11.0
1961	5,953	119	3	116	62	20.0	.1	19.5	10.4

#2 C - INTERMEDIATE GENERAL HOSPITALS
(40-99 beds)

Montana - 5 Year Period - 1957-1961

Neonatal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	29,626	554	47	507	351	18.7	1.6	17.1	11.8
1	1,089	7	0	7	8	6.4	0.0	6.4	7.3
2	1,052	12	1	11	4	11.4	1.0	10.5	3.8
3	3,031	43	2	41	35	14.2	.7	13.5	11.5
3	1,930	27	1	26	29	14.0	.5	13.5	15.0
4	1,792	26	0	26	28	14.5	0.0	14.5	15.6
5	1,271	21	2	19	14	16.5	1.6	14.9	11.0
6	1,175	27	9	18	11	23.0	7.7	15.3	9.4
7	1,607	25	0	25	17	15.6	0.0	15.6	10.6
8	1,755	29	1	28	21	16.5	0.6	16.0	12.0
9	3,210	57	4	53	33	17.8	1.2	16.5	10.3
10	2,329	44	3	41	41	18.9	1.3	17.6	17.6
11	1,701	33	2	31	22	19.4	1.2	18.2	12.9
12	409	8	0	8	3	19.6	0.0	19.6	7.3

#2 C - INTERMEDIATE GENERAL HOSPITALS
(40-99 beds)

Montana - 5 Year Period - 1957-1961
(continued)

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Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
13	1,881	43	3	40	27	22.9	1.6	21.3	14.4
14	1,700	45	8	37	14	26.5	4.7	21.8	8.2
15	1,686	41	2	39	18	24.3	1.2	23.1	10.7
16	2,008	66	9	57	26	32.9	4.5	28.4	12.9

#3 A - SMALL GENERAL HOSPITALS
(10-39 beds)

Montana - 1961

Infant and Fetal Mortalities

Neo-natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	3,843	86	10	76	37	22.4	2.6	19.8	9.6
1	55	0	0	0	0	0.0	0.0	0.0	0.0
1	60	0	0	0	0	0.0	0.0	0.0	0.0
1	7	0	0	0	0	0.0	0.0	0.0	0.0
1	5	0	0	0	0	0.0	0.0	0.0	0.0
1	101	0	0	0	0	0.0	0.0	0.0	0.0
1	91	0	0	0	0	0.0	0.0	0.0	0.0
1	17	0	0	0	0	0.0	0.0	0.0	0.0
1	11	0	0	0	0	0.0	0.0	0.0	0.0
1	45	0	0	0	1	0.0	0.0	0.0	22.2
1	61	0	0	0	3	0.0	0.0	0.0	49.2
2	133	2	1	1	1	15.0	7.5	7.5	7.5
3	243	3	1	2	3	12.3	4.1	8.2	12.3

#3 A - SMALL GENERAL HOSPITALS
(10-39 beds) Continued

Montana - 1961

Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
4	111	1	0	1	0	9.0	0.0	9.0	0.0
5	105	1	0	1	0	9.5	0.0	9.5	0.0
5	105	1	0	1	2	9.5	0.0	9.5	19.0
6	92	1	0	1	0	10.9	0.0	10.9	0.0
7	88	1	0	1	2	22.7	0.0	11.4	11.4
8	151	2	0	2	1	13.2	0.0	13.2	6.6
9	146	2	0	2	0	13.7	0.0	13.7	0.0
10	68	1	0	1	0	14.7	0.0	14.7	0.0
11	264	4	0	4	4	15.2	0.0	15.2	15.2
11	66	1	0	1	1	15.2	0.0	15.2	15.2
12	116	2	0	2	0	17.2	0.0	17.2	0.0
13	193	5	1	4	1	25.9	5.2	20.7	5.2
14	142	4	1	3	3	28.2	7.0	21.1	21.1
15	45	1	0	1	2	22.2	0.0	22.2	44.4

#3 A - SMALL GENERAL HOSPITALS
(10-39 beds) Continued

Montana - 1961

Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
16	171	4	0	4	2	23.4	0.0	23.4	11.7
17	41	1	0	1	0	24.4	0.0	24.4	0.0
18	75	2	0	2	0	26.7	0.0	26.7	0.0
19	157	5	0	5	1	31.2	0.0	31.2	6.4
20	61	2	0	2	0	32.8	0.0	32.8	0.0
21	30	1	0	1	2	33.3	0.0	33.3	66.7
22	54	2	0	2	0	37.0	0.0	37.0	0.0
23	203	13	5	8	3	64.0	24.6	39.4	14.8
24	246	10	0	10	2	40.7	0.0	40.7	8.1
25	206	10	1	9	0	48.5	4.9	43.7	0.0
26	63	3	0	3	1	47.6	0.0	47.6	15.9
27	15	1	0	1	2	66.7	0.0	66.7	133.3

#3 B - SMALL GENERAL HOSPITALS
(10-39 beds)

Montana - 5 Year Period - 1957 through 1961

Year	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	*19,374	402	89	313	253	20.7	4.6	16.1	13.1
1957	4,099	88	34	54	58	21.5	8.3	13.2	14.1
1958	3,736	83	18	65	60	22.2	4.8	17.4	16.1
1959	3,898	68	14	54	51	17.4	3.6	13.9	13.9
1960	3,798	77	13	64	47	20.3	3.4	16.9	12.4
1961	3,843	86	10	76	37	22.3	2.6	19.8	9.6

* These figures differ from the "C" chart because some hospitals included in previous years have closed this year and are not included in the "C" chart.

#3 C - SMALL GENERAL HOSPITALS
(10-39 beds)

Montana - 5 Year Period - 1957-1961

Neo-natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	18,261	362	65	297	233	19.8	3.6	16.3	12.8
1	323	1	0	1	4	3.1	0.0	3.1	12.1
2	223	1	0	1	5	4.5	0.0	4.5	22.4
3	394	2	0	2	8	5.1	0.0	5.1	20.3
4	121	4	3	1	3	33.1	24.8	8.3	24.8
5	474	5	1	4	10	10.5	2.1	8.4	21.1
6	351	3	0	3	0	8.5	0.0	8.5	0.0
7	221	2	0	2	2	9.0	0.0	9.0	9.0
8	297	5	2	3	2	16.8	6.7	10.1	6.7
9	570	7	1	6	5	12.3	1.8	10.5	8.8
10	515	7	1	6	7	13.6	1.9	11.7	13.6
11	1,226	16	0	16	14	13.1	0.0	13.1	11.4
12	528	9	2	7	3	17.0	3.8	13.3	5.7
13	797	11	0	11	7	13.8	0.0	13.8	8.8

#3 C - SMALL GENERAL HOSPITALS
(10-39 beds) Continued

Montana - 5 Year Period - 1957-1961

Neo-natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
14	352	6	1	5	5	17.0	2.8	14.2	14.2
15	69	1	0	1	0	14.5	0.0	14.5	0.0
16	137	2	0	2	0	14.6	0.0	14.6	0.0
17	610	9	0	9	6	14.8	0.0	14.8	9.8
18	731	12	1	11	20	16.4	1.4	15.0	27.4
19	194	3	0	3	3	15.5	0.0	15.5	15.5
20	373	7	1	6	8	18.8	2.7	16.1	21.4
21	669	18	7	11	12	26.9	10.5	16.4	17.9
22	782	13	0	13	2	16.6	0.0	16.6	2.6
23	461	8	0	8	6	17.4	.0	17.4	13.0
24	397	8	1	7	3	20.2	2.5	17.6	7.6
25	440	9	1	8	2	20.5	2.3	18.2	4.5
26	924	23	6	17	15	24.9	6.5	18.4	16.2
27	788	18	3	15	8	22.8	3.8	19.0	10.2

#3 C - SMALL GENERAL HOSPITALS
(10-39 beds) Continued

Montana - 5 Year Period - 1957-1961

Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
28	362	7	0	7	3	19.3	0.0	19.3	8.3
29	450	9	0	9	6	20.0	0.0	20.0	13.3
30	966	31	11	20	14	32.1	11.4	20.7	14.5
30	1,206	29	4	25	16	24.0	3.3	20.7	13.3
31	1,056	39	16	23	20	36.9	15.2	21.8	18.9
32	560	14	0	14	7	25.0	0.0	25.0	12.5
33	235	8	2	6	4	34.0	8.5	25.5	17.0
34	459	15	1	14	3	32.7	2.2	30.5	6.5

#4 A - COMMUNITY FACILITY
(Under 10 beds)

Montana - 1961

Neo- natal rank in group	No. of live births	Number of Deaths				Rate per 1,000 live births			
		Infant	1 - 12 Months	Neonatal	Stillbirth	Infant	1 - 12 Months	Neonatal	Stillbirth
Total	104	1	0	1	2	9.6	0.0	9.6	19.2
1	37	0	0	0	0	0.0	0.0	0.0	0.0
2	15	0	0	0	2	0.0	0.0	0.0	133.3
3	52	1	0	1	0	19.2	0.0	19.2	0.0

